Claim Amendments

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-17 Canceled

18. (Currently Amended) ~~A thyristor formed in an integrated~~An integrated data processing device~~, the thyristor~~ comprising:

a first circuit coupled to a first voltage reference node;

a second circuit coupled to a second voltage reference node;

an electrostatic discharge protection device operable to provide a current path between the first voltage reference node and the second voltage reference node during an electrostatic event, the electrostatic discharge protection device comprising

a first conductivity type junction formed between a first region of a first conductivity type and a second region of a second conductivity type;

a second conductivity type junction formed between the second region and a third region of the first conductivity type;

a third conductivity type junction formed between the third region and a fourth region of the second conductivity type, the fourth region coupled to the second voltage reference node; and

an anode node coupled to the first voltage reference node and connected to one or more regions of the electrostatic discharge protection device including the first region, wherein ~~each of the one or more~~all regions of the discharge protection device ~~regions~~ connected to the anode node are of a common conductivity type.

19. (Currently Amended) The ~~thyristor~~ device of claim 18 further comprising:

a low voltage trigger control portion coupled to the second region and the third region to provide a thyristor triggering current at a voltage of less than 10 volts.

20. (Currently Amended) The ~~thyristor~~ device of claim 18 formed using a complimentary metal oxide semiconductor process.

21. (Currently Amended) An apparatus comprising:

a first circuit coupled to a first voltage reference node;

a second circuit coupled to a second voltage reference node;

an electrostatic discharge protection device operable to provide a current path and a capacitance of less than 120 Femtofarads between the first voltage reference node and the second voltage reference node during an electrostatic event, the electrostatic discharge protection device comprising

~~a first voltage reference node to provide a first voltage reference;~~

~~a second voltage reference node, adapted to be isolated from the first voltage reference node during normal operating conditions, to provide the first voltage reference;~~

a thyristor coupled between the first voltage reference node and the second voltage reference node to provide ~~a current~~the current path ~~between the first voltage reference node and the second voltage reference node during an electrostatic event~~.

22. (Canceled)

23. (Currently Amended) The apparatus of ~~claim 22~~claim 21 wherein the first circuit is an analog circuit and the second circuit is a digital circuit.

24. (Currently Amended) The apparatus of ~~claim 22~~claim 21 wherein the first circuit is a radio frequency analog circuit.

25. (Previously Presented) The apparatus of claim 23 wherein the second circuit is a digital circuit.

26. (Previously Presented) The apparatus of claim 24 wherein the second circuit is an analog circuit.

27. (Currently Amended) A method comprising the steps of:

providing a voltage reference to a first circuit of an integrated circuit device using a first voltage reference node during normal operation;

providing the voltage reference to a second circuit of the integrated circuit device using a second voltage reference node during normal operation, the second voltage reference node and the first voltage reference node being different nodes;

detecting a voltage difference between ~~a first~~the first voltage reference node and ~~a second~~the second voltage reference node of less than approximately 10 volts to determine when an electrostatic discharge event is occurring~~, wherein, the first voltage reference node and the second voltage reference node are isolated from each other and are to provide a first voltage reference~~ ;

providing a conductive ~~conductive~~ path through a thyristor having a capacitance of less than 120 Femtofarads from anode to cathode when the voltage difference is detected~~less than approximately 10 volts~~.

28. (Canceled)

29. (Currently Amended) The method of claim 27, ~~wherein~~ wherein the triggering current occurs at a voltage of less than 10 volts.

30. (Currently Amended) An apparatus comprising:

a thyristor comprising a first p-doped region, a first n-doped region, a second p-doped region, and a second n-doped region, a first junction formed by the first p-doped and first n-doped region, a second junction formed by the first n-doped region and the second p-doped region, and a third junction formed by the second p-doped region and the second n-doped region, an anode coupled to the first n-doped region only through the first p-doped region, and a cathode coupled to the second p-well only through the second n-doped region; and

a first voltage reference node coupled to the anode, and

a second voltage reference node adapted to be isolated from the first voltage reference node during normal operating conditions coupled to the ~~cathode~~ cathode.

31. (Previously Presented) The apparatus of claim 30, wherein the first voltage reference node and the second voltage reference node are to provide a common voltage reference.

32. (Currently Amended) The apparatus of ~~claim 30~~claim 31, wherein the common voltage references is a ground voltage reference.

33. (New) An apparatus comprising:

a thyristor comprising

a plurality conductivity type junctions comprising

a first conductivity type junction formed between a first region of a first conductivity type and a second region of a second conductivity type;

a second conductivity type junction formed between the second region and a third region of the first conductivity type;

a third conductivity type junction formed between the third region and a fourth region of the second conductivity type;

an anode connected to the plurality of conductivity type junctions only at the first region;

a cathode coupled to the fourth region;

a first voltage reference node coupled to a first circuit and the anode; and

a second voltage reference node coupled to a second circuit and the cathode, wherein the thyristor is operable to provide a current path between the first voltage reference node and the second voltage reference node during an electrostatic event.

34. (New) The apparatus of claim 33 wherein the second region is a well region of the second conductivity type.

35. (New) The apparatus of claim 34 wherein the third region is a well region of the first conductivity type.

36. (New) The apparatus of claim 35, wherein the cathode is connected to the plurality of conductivity type junctions only at the fourth region.

37. (New) The apparatus of claim 33, wherein the cathode is connected to the plurality of conductivity type junctions only at the fourth region.

38. (New) The apparatus of claim 33, wherein the first voltage reference node and the second reference node are to provide a common voltage reference.

39. (New) The apparatus of claim 33 further comprising:

a voltage trigger control coupled to the second region and the third region to provide a thyristor triggering current.

40. (New) The apparatus of claim 39, wherein the voltage trigger control is a zener diode.

41. (New) The apparatus of claim 39, wherein the voltage trigger control is a field effect transistor.

42. (New) The apparatus of claim 18, wherein the first voltage reference node and the second voltage reference node are ground nodes.

43. (New) The device of claim 42, wherein the electrostatic discharge protection device further comprises:

and a cathode node coupled to the second voltage reference node and connected to one or more regions of the electrostatic discharge protection device including the fourth region, wherein all regions of the electrostatic discharge protection device connected to the anode node are of a common conductivity type.